

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Serial No.: 10/711,649  
Applicant: Kawamura et al.  
Art Unit: 2813  
Title: **A METHOD FOR SUPERCRITICAL CARBON DIOXIDE  
PROCESSING OF FLUORO-CARBON FILMS**  
Attorney Docket: SSIT-114  
Confirmation No.: 5648

Cincinnati, Ohio 45202

April 30, 2007

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicants request review of the October 30, 2006 rejections in the above-identified application. No amendments are being filed with this request, and it is being filed concurrently with a Notice of Appeal and a request for a third month extension (a two month extension was requested and paid for concurrently with the response filed by Applicants on March 30, 2007). A Response After Final was filed March 30, 2007, but no Action from the Examiner has been issued as of today's date, which is the 6-month statutory deadline. The review is requested for the reasons set out herein below.

**REMARKS/ARGUMENTS FOR REVIEW**

Claims 1, 2, 5-15 and 17-26 are pending and stand rejected. Claims 1, 2, 5, 7-9, 12, 14, 15, 17, 18, 20-22 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Reid et al. Claims 6, 10, 11, 19, 23 and 24 stand rejected under 35 U.S.C. § 103 as being obvious over Reid et al. in view of Bhanap et al., and claims 13 and 26 stand rejected under § 103 as being obvious over Reid et al. in view of Sieber et al. Review is requested for all claims.

A Response After Final was filed March 30, 2007. No Action has been received yet from Examiner in response. Because the 6-month statutory period expires today, Applicants hereby file this Request with a Notice of Appeal in the event the Examiner does not withdraw the

rejections in view of the Response. The errors in fact that justify the present Request are fully set forth in Pages 2-6 of the March 30, 2007 Response. As fully explained therein, Examiner has merely picked parts of the disclosure of Reid et al. and pieced them together in an attempt to support the rejections under §§ 102 and 103 without regard to their context. Reid et al., when read as a whole and in context, simply does not teach each and every element of the claimed method, nor provide any suggestion to one of ordinary skill in the art of semiconductor processing to combine elements in the way set forth in the present claims. It is firmly established that it is not permissible to pick and choose only so much of any given reference as will support a given position and ignore the reference in its totality. The context of the disclosure must be considered. Examiner has simply found that Reid et al. disclose using supercritical fluid and a solvent for "something" related to a fluorocarbon film, and then concludes that the "something" is a treating of an exposed surface of the fluorocarbon film to remove contaminants from that surface and to provide surface termination. A careful review of the reference, however, will reveal that Examiner's conclusion is completely unfounded, and based upon picking and choosing parts of the reference, stripping the parts of their context, and then putting them together in a manner that bears no resemblance to the actual disclosure of the reference to attempt to defeat patentability. This cannot stand, as it represents clear error in fact.

With respect to the rejections under § 102, Reid et al. fails to teach treating the exposed surface of a fluoro-carbon dielectric film with supercritical carbon dioxide fluid and an alcohol and/or silicon-containing chemical solvent to clean the exposed surface of contaminants thereon and to provide the exposed surface with surface termination. The rejection is clear error because there can be no anticipation where the reference fails to teach every element of the claim. Examiner's misinterpretation of the reference and Examiner's exercise in picking and choosing portions of the reference, divorcing the portions from their context, and then piecing the portions together in an attempt to defeat patentability have resulted in this clear error under § 102.

With respect to the rejections under § 103, the primary reference, Reid et al., does not teach what the Examiner asserts that it teaches. Neither Bhanap et al. or Sieber et al cure this deficiency. For a *prima facie* case of obviousness, each and every element of the claim must be taught or suggested by the combination of references. As discussed above, Reid et al. fails to

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to final Office Action mailed October 30, 2006

teach treating the exposed surface of a fluoro-carbon dielectric film with supercritical carbon dioxide fluid and an alcohol and/or silicon-containing chemical solvent to clean the exposed surface of contaminants thereon and to provide the exposed surface with surface termination. Bhanap et al. disclose a silicon-containing precursor for depositing silica in a spin-on-coating process, not a solvent for cleaning surface contaminants and surface termination. Thus, even when the references are combined, one still does not arrive at the presently claimed invention. Moreover, there is no suggestion to one of ordinary skill in the art of semiconductor processing to combine elements in the way set forth in the present claims. Thus, the rejections under § 103 are clearly in error, as the combination does not teach or suggest each and every element such that there is no *prima facie* case of obviousness, and furthermore, there is no motivation to combine the elements from the references to arrive at the claimed invention, and even doing so does not result in the claimed invention.

As evidenced above and in Applicants Response After Final (filed March 30, 2007), there is clear error in the rejections, and hence, Applicants should not be forced through the time and expense of a full-blown appeal.

Respectfully submitted,  
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